Part 1: Registration

Please complete this form to register as an official nominee of the 2017 Broadcom MASTERS competition. The content in Part 1 is not used in evaluation. Please note that this section contains a second page.

STUDENT INFORMATION

Name, Email Address, Phone Number, Date of Birth, Sex, Ethnicity, Race, T-shirt Size

Mailing Address

PARENT/GUARDIAN INFORMATION

This information will be used after the application has closed. You may enter the same adult listed in the Designated Adult section, or you may choose a different parent or guardian.

Name, Relationship to Entrant, Phone Number, Email Address

SCHOOL INFORMATION

Name of Current School (2016/2017 academic year)

Type of School

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School Address

Identify the teacher who has most supported your science or engineering project. This teacher MUST be a middle school teacher, a middle school informal science program educator, or a middle school homeschooling instructor. Your teacher receives application reminders and notifications from The Society, and receives notification if you are selected as a top 30 finalist or top 300 MASTER. This teacher will receive awards if you advance to the semifinalist or finalist level. You will not be permitted to change the teacher listed here after the application deadline.

Teacher Information

Name and Email address

Principal Information

Name and email address

SCIENCE FAIR INFORMATION

You were nominated for the Broadcom MASTERS by (FAIRID)

- ○ Yes
- ○ No

Please enter the fair password from the second fair

Is this a team project?

Just a friendly reminder: each member of a team project needs to submit his/her own independent application in his/her own words.

- ○ Yes
- ○ No

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If you worked on a team, please list the name(s) of your team member(s). If you did not work on a team, please leave this question blank.

	First Name	Last Name
Team Member #1		
	First Name	Last Name
Team Member #2		

Are you an alumnus of the Broadcom MASTERS program?

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Part 2: Project Information

This is your chance to tell us about your awesome science or engineering project in your own words. If you are feeling stumped, take a look at your science fair board for inspiration. This section is designed to feel like a judging interview at your science fair.

Select a category that best describes your project:

These categories might differ from the categories at your local science fair. Here's a helpful hint to help you choose: think about what type of scientist or educator would best understand your project.

- ○ Animal Science
- ○ Behavioral & Social Sciences
- ○ Chemistry
- ○ Computer Science & Software Engineering
- ○ Energy & Sustainability
- ○ Engineering—Electrical & Mechanical
- ○ Engineering—Materials & Bioengineering
- ○ Environmental & Earth Sciences
- ○ Mathematics
- ○ Medicine & Health Sciences
- ○ Microbiology/Biochemistry
- ○ Physics (includes Air/Space Science)
- ○ Plant Science

Project Title

This is how your project title will appear in our materials if you are select to the top 300 or top 30.

What is your current grade (2016/2017 academic year)?

- ○ 6th
- ○ 7th

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- ○ 8th

Remind us, is this a team project?

- ○ Yes
- ○ No

What was the inspiration for your science or engineering project? Please describe if there was a personal experience, challenge or individual(s) that inspired your choice of this project. (max. 100 words)

TELL US ABOUT YOUR SCIENCE FAIR PROJECT

What was your research question? For engineering projects: what was the human need or problem you wanted to solve? (max. 50 words)

What was your scientific hypothesis or engineering design criteria? (max. 125 words)

Explain your methodology and procedures for carrying out your project in detail, addressing the questions below. For engineering projects, explain your methods and procedures for building your design, addressing the questions below (max. 400 words).

1) How did you collect your data? For engineering projects, how did you build your design?2) What were your testing procedures? For engineering projects, how did you test your design?3) Discuss your control group and variables tested. For engineering projects, discuss the controls and variables tested in your design.

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How did you analyze and interpret your data? (max. 300 words)

Use this section to write about the process of analyzing and interpreting your data. You will have an opportunity to share charts, tables, graphs, photos, etc. containing your data in a ONE (1) page PDF document later in this application. For engineering projects, this question still applies. Tell us HOW you formed your conclusions through observation and any special analysis used.

What conclusions did you reach? Why? How does your data support this conclusion? (max. 250 words)

TELL US WHAT YOU LEARNED FROM YOUR PROJECT

Did questions or problems arise that you were not expecting? How would you adjust your experimental design or your engineering design process to address these problems? (max. 150 words)

Where did you conduct your experimentation?

Please select all that apply.

- ☐ Home
- ☐ School
- ☐ Lab (Please Specify) _____
- ☐ Workplace (Please Specify) _____
- ☐ Other (Please Specify) _____

A science or engineering project is never a solitary activity. Tell us who contributed to your research and what resources did they bring to your project: (max. 250 words)

Where and how did you conduct your research? What special equipment did you use? Who supervised and/or collaborated with you on your research (i.e. parents, teachers, mentors, peers?)

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What were their contributions? Were there others who helped you perform your research who you wish to tell the evaluators about?

What did you learn from conducting and presenting your science fair project? (200 word maximum)

Please consider addressing the following points in your answer:· What lessons did you learn from doing your project?· What lessons did you learn from presenting your project?· What question would you ask next or engineering project would you pursue if you chose to continue exploring this topic?

If you were a member of a team project, please explain your role in researching, developing and presenting your project. Describe how work was divided among your team. (max. 150 words)

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Part 3: Essay Questions

This section provides you with an opportunity to tell us more about you and your thoughts about science, technology, engineering and math (STEM) as they relate to your project and in general.Select one (1) question in each of the three sections: About My Project, About Me, and Solve a Problem, then compose your answers in the resulting text boxes.

About My Project (please select ONE question, then answer in the text box below):

- Submit an abstract for your project (250 words or less).
- You are on an elevator and have only until the 10th floor to describe your project to a potential investor (Describe your project in three sentences or less. max. 250 words).

About My Project:

About Me (please select ONE question, then answer in the text box below):

- Imagine you are an astronaut exploring a new planet with alien life forms. As a representative of Earth, you are to present the aliens with three gifts from our planet. What items would you give and why? (max. 250 words)
- If you could be on a reality tv show, which show would you choose, what role would you play and why? (max. 250 words)

About Me:

Solve a Problem (please select ONE question, then answer in the text box below):

- Imagine that the stream that flows through your local park has turned neon green. Gross! What steps would you take to return the stream to a healthy state? (max. 300 words)

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- Without searching the exact question, how would you use data available on the internet to estimate the amount of pizza (in square feet) eaten in the United States each year? (max. 300 words)

Solve a Problem:

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Part 4: Personal Interests

Tell us a about yourself as an individual, apart from your science fair project and your thoughts on science or engineering. Share information that will help us get to know you better.

Check activities in which you are currently or have been involved:

Check all that apply

- ☐ Science Club
- ☐ Science/Math Olympiad
- ☐ Boy Scouts/Girl Scouts (provide rank) _____
- ☐ 4-H
- ☐ Future Farmers of America
- ☐ Boys & Girls Club
- ☐ School Publications
- ☐ Music (instrument or choir)
- ☐ Athletics
- ☐ Art Club
- ☐ Computer Club
- ☐ Community Service (where?) _____
- ☐ Robotics
- ☐ Odyssey of the Mind
- ☐ Science Bowl
- ☐ Science or Engineering Summer Camp (list name of camp) _____
- ☐ Yearbook
- ☐ Student Council
- ☐ Foreign Language studies (list language) _____
- ☐ Other _____

Which instrument? (select all that apply)

- ☐ Piano

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- ☐ Cello
- ☐ Violin
- ☐ Trumpet
- ☐ Guitar
- ☐ French Horn
- ☐ Saxophone
- ☐ Flute
- ☐ Clarinet
- ☐ Choir
- ☐ Other, please specify... _____

Which sport? (select all that apply)

- ☐ Lacrosse
- ☐ Soccer
- ☐ Baseball
- ☐ Basketball
- ☐ Tennis
- ☐ Swimming
- ☐ Golf
- ☐ Volleyball
- ☐ Track/Cross Country
- ☐ Gymnastics
- ☐ Softball
- ☐ Dance
- ☐ Other, please specify... _____

What hobbies or extra-curricular activities do you most enjoy and why? (max. 100 words)

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Tell us about a time you worked in a team. In your opinion, what is the most important trait of a successful team? (max. 150 words)

Is there additional information that you wish to share with the judges to help them better know you as an individual and what is personally important to you? Future goals, favorite topics, accomplishment of which you are most proud, etc.-- this is your chance to share anything (max. 100 words)

Which one of the following STEM careers are you most interested in pursuing?

Please note-- careers will display below in random order. To find a specific career, click inside the box and type the name. If it's included in the list, the career will appear in blue.

- ☐ Electrical Engineer
- ☐ Climatologist
- ☐ Medical Doctor
- ☐ NanoSystems Engineer
- ☐ Cartographer
- ☐ Biologist
- ☐ Biomedical Engineer
- ☐ Neurologist
- ☐ Chemist
- ☐ Mechanical Engineer
- ☐ Cardiovascular Technician
- ☐ Industrial Engineer
- ☐ Astrophysicist
- ☐ Computer Scientist
- ☐ Physicist
- ☐ Science Teacher
- ☐ Animal Trainer

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- ☐ Sound/Light Engineer
- ☐ Pharmacist
- ☐ Epidemiologist
- ☐ Aeronautical Engineer
- ☐ Surgeon
- ☐ Surveyor
- ☐ Meteorologist
- ☐ Civil Engineer
- ☐ Materials Scientist
- ☐ Computer Engineer
- ☐ Nutritionist
- ☐ Optometrist
- ☐ Nuclear Engineer
- ☐ Dentist
- ☐ Orthodontist
- ☐ Physical Therapist
- ☐ Nurse
- ☐ Hydrologist
- ☐ Anthropologist
- ☐ Forensic Scientist
- ☐ Forest Ranger
- ☐ CAD Technician
- ☐ Imagineer
- ☐ Astronomer
- ☐ Audiologist
- ☐ Laboratory Technician
- ☐ Respiratory Therapist
- ☐ Health Care Professional
- ☐ Geologist
- ☐ Speech/Language Pathologist

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- ☐ Veterinarian
- ☐ Statistician
- ☐ Mathematician
- ☐ Emergency Medical Technician
- ☐ Seismologist
- ☐ Zoologist
- ☐ Semiconductor Processor
- ☐ Satellite Imaging Engineer
- ☐ Biochemist
- ☐ Environmental Engineer
- ☐ Other _____
- ☐ Imagineer

Why does this career interest you? (max. 100 words)

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Science Fair Paperwork Wizard

Where did you conduct your lab work? (check all that apply)

- ☐ Home
- ☐ School
- ☐ Field
- ☐ Research Institution (ie: a laboratory); specify name: _____

Check all aspects among the following that were used in your research (must select at least one):

- ☐ Human Participants - Used Survey
- ☐ Human Participants - Did not use survey
- ☐ Vertebrate Animals
- ☐ Hazardous Chemicals, Activities and Devices
- ☐ Recombinant DNA
- ☐ Microorganisms
- ☐ Human/Animal Tissue
- ☐ None of the above

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If you have checked any of the aspects above, EXCEPT the last option "None of the above," your project may have required pre-approval by a Scientific Review Committee (SRC) or Institutional Review Board (IRB). Please upload copiesof any forms your science fair or school required to approve your research, and answer the questions below.Many fairs use the Intel ISEF approval forms (Form 1A, 1B and other supplemental forms); however some fairs have their own local equivalent. Please see the Intel ISEF Rules for clarification: https://student.societyforscience.org/international-rules-pre-college-science-researchIf you checked "None of the above," you do not need to submit any forms.

Please do not upload supplemental essays, abstracts, links, or documents about your project, as only the written information in your application will be reviewed

Please upload your science fair paperwork

PDF FORMAT ONLY! Other file formats will NOT be accepted. If you need help merging multiple files into ONE single file, try this free online tool. If you are still having trouble, email masters@societyforscience.org for assistance.

Please provide a very brief summary of the approval and permission process at your school or science fair, including answers to the following questions:

Who approved your project idea? Who supervised your project? What type of permissions did you receive throughout the process? What type of paperwork did you complete?

Thank you! You do not need to submit any paperwork to Broadcom MASTERS for additional review. We recommend that you save copies of any paperwork you may have completed for your personal records.

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